IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MASSACHUSETTS

DIOMED, INC., Plaintiff, v. VASCULAR SOLUTIONS, INC., Defendant.	Civil Action No. 1:04-CV-10444-RGS

DIOMED'S COMBINED RESPONSIVE *MARKMAN* MEMORANDUM ON CLAIM CONSTRUCTION IN OPPOSITION TO ANGIODYNAMICS' AND VASCULAR SOLUTIONS' OPENING CLAIM CONSTRUCTION BRIEFS

Note: This combined responsive brief is being filed in both Diomed, Inc. v. AngioDynamics, Inc., Civil Action No. 04-CV-10019 (RGS) and Diomed, Inc. v. Vascular Solutions, Inc., Civil Action No. 04-CV-10444 (RGS).

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Pursuant to the Court's Scheduling Order, and as provided for by the Supreme Court in Markman v. Westview Instruments, Inc., 517 U.S. 370 (1996), Plaintiff Diomed submits this responsive memorandum on claim construction for the asserted claims of U.S. Patent No. 6,398,777 ("the '777 patent").

I. FILING OF COMBINED RESPONSIVE BRIEF

Because the claim construction issues in Diomed, Inc. v. AngioDynamics, Inc., Civil Action No. 04-CV-10019 (RGS) and Diomed, Inc. v. Vascular Solutions, Inc., Civil Action No. 04-CV-10444 (RGS) substantially overlap, Diomed submits this combined memorandum in both cases, responding to both AngioDynamics' and Vascular Solutions' ("VSI") arguments together in one brief.[1]

II. SUMMARY OF ARGUMENT

As explained in Diomed's opening briefs, various laser treatments for blood vessels such as varicose veins were known before the '777 patent. It was the inventors of the '777 patent, however, who discovered that emitting laser energy while the laser emitting section (i.e., the exposed or uncoated portion) of a fiber optic line is in contact with the inner wall of a blood vessel leads to a more effective and successful treatment.

The '777 patent and its prosecution history accordingly make clear that contact between the exposed portion of the fiber optic line and the wall of the blood vessel is an essential feature of the invention. Indeed, the asserted claims of the '777 patent, which are directed to a "method of treating a blood vessel using laser energy," each explicitly include the step of placing the laser emitting section of a fiber optic line "into intraluminal contact with the blood vessel."

[1] Diomed will shortly raise for the Court's consideration a proposal to consolidate pre-trial proceedings in at least these two cases.

The precise *way* of achieving contact between the exposed portion of the fiber and the vessel wall, however, is – contrary to strident assertions in both Defendants' briefs – not at all critical. The patent covers the claimed treatment process regardless of how contact is achieved.

Federal Circuit case law emphasizes the fundamental principle of claim construction that patent claims must be afforded the full breadth of claim scope consistent with their own language, without being limited to particular features discussed in the patent specification. E.g., TI Group Automotive Sys. (N. Am.), Inc. v. VDO N. Am., LLC, 375 F.3d 1126, 1138 (Fed. Cir. 2004) ("TI Group is entitled to the full breadth of claim scope supported by the words of the claims and the written description."); see also Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc., 381 F.3d 1111, 1117 (Fed. Cir. 2004) ("[P]articular embodiments appearing in the written description will not be used to limit claim language that has broader effect.").

It is therefore legal error to limit the scope of a patent claim by importing limitations from the specification into the claim. Liebel-Flarsheim Co. v. Medrad, Inc., 358 F.3d 898, 904 (Fed. Cir. 2004) ("[I]t is improper to read a limitation from the specification into the claims.").

The thrust of the Defendants' argument, however, is a repeated request that the Court do just that – inviting the Court to commit errors that the Federal Circuit has had repeated occasion to correct. For example, although independent claim 9 of the '777 patent requires only "contact" between the fiber and the vessel wall (without specifying a particular way in which that contact must be achieved), the Defendants ask the Court to require that contact be achieved through "compression" and "drainage" of the vessel in *all* the claims. These ways of achieving contact, however, are aspects of the preferred embodiment that the inventors chose to recite only in *dependent* claims 10 and 17. Limiting independent claim 9 in this way would import claim limitations from the specification, contrary to the above-cited case law, and would be error for the additional reason that it would violate the well-settled doctrine of claim differentiation.

The preferred embodiments of the '777 patent, which include compression and/or drainage steps, are specifically called out as being "representative" – *not exclusive* – "of methods of the present invention." (Col. 4, lines 29-30). The patent specification also explains that while it "contains specificities, these should not be construed as limiting the scope of the present invention, but as merely providing illustrations of some of the presently preferred embodiments of the present invention." (Col. 6, lines 60-64). In short, the '777 patent does not fall into that narrow exception to the above rules where a feature described in the specification is said to be "the invention" itself.

The '777 patent specification never states that compression or drainage of the vessel are necessary to achieve contact, or that that methods in which contact is achieved without compression or drainage are outside the scope of the invention. To the contrary, it carefully explains – in the context of every disclosed embodiment – that these preferred techniques are recommended simply to help ***ensure*** that contact occurs.

Naturally, contact between the exposed portion of the fiber optic line and the vessel wall can and does occur in other ways, even if not caused by compression and drainage as described in the preferred embodiment. In other words, compression and drainage are not required.

The claims of the '777 patent confirm this. Dependent claims 10 and 17 are specifically directed to the drainage and compression (respectively) of the preferred embodiment ("thereby ***ensuring*** contact" as stated in claim 17). By contrast, independent claim 9 – which was, as is common, drafted to be broader than the preferred embodiment – is *not* limited to either compression or drainage. See, e.g., Fuji Photo Film Co., Ltd. v. Int'l Trade Comm'n, 2004 WL 2248087, -- F.3d -- (Fed. Cir. Oct. 7, 2004) (claimed invention is broader than preferred embodiment).

The prosecution history of the '777 patent is consistent with the specification and claims.

The inventors filed the '777 patent application with twenty claims, including claims 9-14 and 16-19 (Angio Ex. 7 at 17-19; VSI Ex. 2 at 38-40), which later issued without amendment or re-numbering. It is these ten claims (plus one other[2]) that Diomed asserts against Defendants.

These claims were initially rejected by the Patent Examiner on the theory that they were unpatentable over certain prior art, namely U.S. Patent Nos. 5,531,739 ("the Trelles patent") and 4,564,011 ("the Goldman patent"). (Angio Ex. 5; VSI Ex. 2 at 67-73).

The Defendants' argument that the '777 patent "requires" compression and drainage (Angio Br. at 5; VSI Br. at 5) rests on the false premise that the inventors responded to the Examiner by relying on those acts to distinguish the prior art. The public record shows that this is incorrect. The inventors in fact argued that the Trelles and Goldman patents do not anticipate or render obvious independent claim 9 (or, by extension, any claims depending therefrom) *because they do not disclose "intraluminal contact" between the laser emitting section of a fiber and the interior wall of the blood vessel* as recited in claim 9. The inventors argued that:

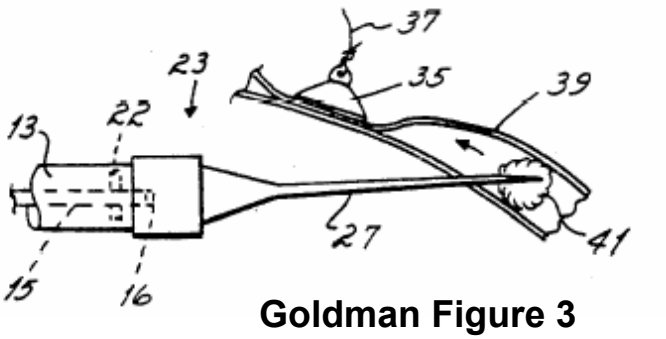
- Independent claim 9 recites a method which includes the step of "placing said laser emitting section into ***intraluminal*** contact with the blood vessel…" Trelles discloses a method wherein the vessel is treated from an exterior position … Accordingly, it is submitted that Trelles cannot anticipate the claimed invention according to independent claim 9. Claims 12, 13 and 18 and 19 depend from claim 9 and therefore incorporate all of the limitations [] thereof. Accordingly it is submitted that Trelles also fails to anticipate claims 12, 13, 18 and 19.
- Independent claim 9 recites a method in which laser emitting means is placed in ***intraluminal contact*** with a blood vessel and laser energy is directed ***into the blood vessel wall*** … the Goldman reference fails to teach any such method. Accordingly it is submitted that Goldman fails to anticipate the claimed invention according to claim 9. Claims 10-11, 17 and 19 depend from claim 9 and thus include all of the features and limitations recited therein thus it is submitted that Goldman also fails to anticipate claims 10-11, 17 and 19.

(Angio Ex. 6; VSI Ex. 2 at 79-86) (emphasis in original).

[2] Claim 21 of the '777 patent, also asserted by Diomed, was added subsequently.

The inventors did *not* distinguish the cited prior art based on compression or drainage of the vessel. Indeed, such an argument would have been groundless (and would not have convinced the Patent Examiner) because the Goldman patent explicitly discloses compression of the vessel – something the Examiner recognized when he initially rejected claim 17 in view of Goldman. (Angio Ex. 5 at 4; VSI Ex. 2 at 71) ("In reference to claim 17, Goldman teaches a method for externally applying pressure to [the] vessel prior to applying the laser energy.").[3]

Figure 4 of the Goldman patent (VSI Ex. 3) is reproduced below. Laser energy transmitted by fiber 15 is focused by fiber lens 16 through needle 27. (Col. 3, lines 27-30). Needle 27 is inserted into vessel 39 and, when the laser is fired, a blood clot 41 is formed. (Col. 3, line 59 – Col. 4, line 2). A "pressure pad 35 … is pressed directly against the vessel 39 to constrict it and prevent the flow of blood therethrough." (Col. 3, lines 61-65). Exerting pressure on the vessel "performs the dual function of limiting the extent of blocking in the blood vessel 39 and also prevents … the release of fragments of the blood clot 41." (Col. 4, lines 10-13).



Goldman Figure 3

The Defendants' suggestion that "compression" of the blood vessel was relied upon to obtain allowance of the '777 patent is illogical because "compression" adds no patentable weight over the Goldman patent, as the Examiner appreciated. It also lacks any basis in the '777 patent file history as noted above and explained in more detail in Section V(D) below.

[3] Goldman does not disclose intraluminal contact between the fiber tip and the vessel wall. To the contrary, Goldman discloses locating the tip in the bloodstream and *spaced away* from the wall (as illustrated above).

In short, the inventors correctly argued to the Examiner that the cited prior art does not disclose *contact* of the exposed portion of the fiber optic line and the vessel wall. The Examiner agreed, and issued the '777 patent claims without amendment. In short, the "prosecution history disclaimer" argument advanced by the Defendants is belied by the public record.

As discussed in more detail below, the Defendants also advance an argument that the "means for emitting laser energy" recited in the '777 patent claims should be narrowly construed to require a "rounded tip." This argument too violates several well-established canons of claim construction by seeking to import a limitation from the specification into the claims, ignoring the doctrine of claim differentiation, and violating unambiguous Federal Circuit precedent on the interpretation of means-plus-function claims.

III. PROCEDURAL POSTURE

A. The '777 Patent Claims At Issue In This Case

Diomed identified which claims of the '777 patent it was asserting (claims 9-14, 16-19 and 21) at an early stage of the case as stipulated to by the parties and required by the resulting Scheduling Orders. (Ex. B to Opening Diomed Briefs). As the Court indicated during the Diomed v. AngioDynamics Scheduling Conference on May 10, 2004, this procedure was desirable because it would enable the parties to focus solely on what was in dispute, narrow the focus of the case, and exchange early explanations of their claim construction positions.

Now AngioDynamics (but not VSI) seeks to undermine that benefit by asking the Court to construe the limitations of claim 1, a claim that is not asserted by Diomed and thus is not at issue in this case. Presumably, AngioDynamics seeks construction of claim 1 in connection with its declaratory judgment counterclaims. (Angio Br. at 8). As discussed in Section VI, however, the Court lacks declaratory judgment jurisdiction over claim 1 because it is not asserted by Diomed and thus does not present a justiciable controversy under the Declaratory Judgment Act.

B. The Parties' Claim Construction Positions

Following Diomed's identification of the asserted claims, the Court's Scheduling Orders next called for the parties to exchange proposed claim interpretations on September 1, 2004. The parties did so. See Ex. C to Opening Diomed Briefs (Diomed's claim construction) and Ex. D to Opening Diomed Briefs (AngioDynamics' and VSI's claim constructions).

After seeing Diomed's position, the Defendants changed theirs, with AngioDynamics providing a "revised" claim chart on September 21 that proposed narrower claim constructions than its September 1 proposal. (Ex. E to Opening Diomed Brief in Diomed v. AngioDynamics). VSI indicated its intention to adopt AngioDynamics' (revised) position.

Then, in their briefs filed on October 1, both Defendants changed their positions *again*, adding yet further proposed limitations to the claims. The specific changes made will be addressed individually in Section V below. Here it is sufficient to note that the stridency with which the Defendants advocate their present claim construction positions in briefing is undercut by their earlier failure to advance those positions at all when they were required to disclose their contentions to Diomed.

By contrast, Diomed's claim construction position has not changed.

IV. THE LAW OF CLAIM CONSTRUCTION

One of the primary claim construction arguments advanced by the Defendants is that the limitation in independent claim 9 of the '777 patent, "placing said laser emitting section … into intraluminal contact with the blood vessel," should be interpreted narrowly and limited to such acts solely when performed in the manner disclosed in the '777 patent's preferred embodiment (and as recited in *dependent* claims 10 and 17) – namely, with "compression" and "drainage" of the vessel.

AngioDynamics *admits* that a construction requiring these limitations would read limitations into claim 9 from the specification. (Angio Br. at 23). It is black-letter Federal Circuit law, however, that claim limitations may not be read into the claims from the specification. Liebel-Flarsheim, 358 F.3d at 904 (reversing district court's claim construction that imported limitations from the specification into the claims).

Although there is "sometimes a fine line between reading a claim in light of the specification, and reading a limitation into the claim from the specification," id. at 905, in this instance the Defendants' proposed construction is nowhere near that line. It violates at least two well-established canons of claim construction: **first,** that claims are not to be limited to a preferred embodiment, and **second,** that independent claims are broader than dependent claims.

As a threshold matter, it is important to bear in mind that the scope of patent claims is policed by patent examiners skilled in the applicable legal standards and the relevant technology. Accordingly, the scope of an issued claim is presumed to be appropriate (without further limitation to unrecited features). Intervet Am., Inc. v. Kee-Vet Labs., Inc., 887 F.2d 1050, 1054 (Fed. Cir. 1989) ("The presumption of validity under 35 U.S.C. § 282 carries with it a presumption the examiner did his duty and knew what claims he was allowing. In any event, the claims as allowed are what we have to deal with and it is not for the courts to say that they contain limitations which are not in them.").

A narrow exception exists for the unusual case – not present here – where a feature not recited in the claim is expressly described in the patent as being "the invention" itself, or as being necessary to "all embodiments" thereof. Scimed Life Sys., Inc. v. Adv. Cardio. Sys., Inc., 242 F.3d 1337, 1343 (Fed. Cir. 2001) (limiting claims to require structure described in specification as "the present invention" itself and also as "the basic sleeve structure for *all embodiments of the present invention contemplated and disclosed herein*") (emphasis in original).

Importing a limitation from the specification into a claim is forbidden, however, if the feature is merely part of an embodiment (even a preferred embodiment) of the invention. Innova, 381 F.3d at 1117 (declining to limit claims to preferred embodiment: "[P]articular embodiments appearing in the written description will not be used to limit claim language that has broader effect."). Defendants would have the exception swallow the rule. Nothing they have cited (and nothing in the patent) puts this case in the unusual category in which the patent itself expressly *limits* the inventive concept *solely* to methods in which compression and drainage are used.

When examining a patent's specification to ensure that the claims are commensurate with the invention disclosed, the courts look for clear statements unambiguously putting the public on notice regarding the scope of rights claimed by the patentee. Id. ("[E]ven where a patent describes only a single embodiment, claims will not be read restrictively unless the patentee has *demonstrated a clear intention to limit the claim scope using words or expressions of manifest exclusion or restriction*.") (emphasis added).

The same holds true for the patent's prosecution history. Omega Eng'g, Inc. v. Raytek Corp., 334 F.3d 1314, 1325-26 (Fed. Cir. 2003) ("[F]or prosecution disclaimer to attach, our precedent requires that the allegedly disavowing actions or statements made during prosecution be *both clear and unmistakable*.") (emphasis added).

The reason for these rules is simple. "To balance the importance of public notice and the right of the patentee to seek broad patent coverage, we have … consistently rejected prosecution statements too vague or ambiguous to qualify as a disavowal of claim scope." Id.

This makes sense. On the one hand, the public is certainly entitled to rely upon patentees' "manifest" and "unmistakable" statements in the public record restricting the scope of their inventions. On the other hand, the incentive function of the patent system (and, indeed, the function of the Patent Office) would be undermined if accused infringers could always narrow

the scope of a patent's claims to its preferred embodiment. See Fuji Photo Film Co., Ltd. v. Int'l Trade Comm'n, 2004 WL 2248087, *9, -- F.3d -- (Fed. Cir. Oct. 7, 2004) ("[A]n accused infringer cannot overcome the heavy presumption that claims should be given their ordinary meaning simply by pointing to the preferred embodiment or other structures or steps disclosed in the specification."), citing Teleflex, Inc. v. Ficosa N. Am. Corp., 299 F.3d 1313 (Fed. Cir. 2002).

In this case, as discussed in detail in Section V(D) below, the steps of "compression" and "drainage" are disclosed as part of the preferred embodiment only, and are never described as limiting the scope of the invention itself, let alone in the "manifest" or "unmistakeable" way required by the Federal Circuit.

Any attempt to limit the scope of the '777 patent claims to require these steps, therefore, is an impermissible bid to "read into" the claims an aspect of the preferred embodiment.[4] Defendants have not overcome the "heavy presumption," Fuji Photo, 2004 WL 2248087 at *9, that the claim language must be given the full scope of its ordinary meaning.

Secondly – and this alone is dispositive – where a dependent claim expressly recites a certain limitation, it is legal error to construe the *independent* claim, which does not recite the dependent claim's limitation, as nevertheless including the same restriction. Liebel-Flarsheim, 358 F.3d at 910 (reversing claim construction that disregarded claim differentiation doctrine). Defendants offer little or no explanation or authority to refute this crucial point. See also Comark Comm'ns, Inc. v. Harris Corp., 156 F.3d 1182, 1187 (Fed. Cir. 1998) (rejecting claim construction that disregarded claim differentiation where defendant "has not shown any reason sufficient to rebut the presumption").

[4] Indeed, AngioDynamics admits this. See Angio Br. at 23 ("[T]he statements in the specification require that the limitations of draining and compression be *read into* the construction of clause (b) of Claim 9.") (emphasis added).

V. CONSTRUCTION OF '777 PATENT CLAIM TERMS AND PHRASES

A. "means for emitting laser energy"

As explained in Diomed's opening brief, patent claim language need not always recite definite structure. Section 112, ¶ 6 of the Patent Statute provides that a claim limitation may, instead, be written in terms of the function to be performed. The usual way to accomplish this is with the phrase "means for" performing the function in question.

Such "means-plus-function" language is deemed to cover any structure that (1) performs the function recited in the limitation; and (2) is identical or "equivalent" to the corresponding structure disclosed in the patent specification for performing that function. E.g., Odetics, Inc. v. Storage Tech. Corp., 185 F.3d 1259, 1267 (Fed. Cir. 1999).

The parties agree that the phrase "means for emitting laser energy" in claims 9 and 21 is written in means-plus-function format. (Angio Br. at 16; VSI Br. at 8). To construe the meaning of the limitation, the Court must first identify the claimed function.

1. The Claimed Function

Correct identification of the claimed function of a means-plus-function limitation is critical in determining the scope of the claim. It is black-letter Federal Circuit law that the function stated in the claim may not be altered. "The statute does not permit limitation of a means-plus-function claim by adopting a function different from that explicitly recited in the claim." Micro Chem., Inc. v. Great Plains Chem. Co., 194 F.3d 1250, 1258 (Fed. Cir. 1999) (reversing district court's claim construction that added to the function explicitly recited in the claim). The reason for this bright-line rule is simple: "An error in identification of the function can improperly alter the identification of structure in the specification corresponding to that function." Id.

Accordingly, as explained in Diomed's opening brief, the function of the "means for emitting laser energy" is, quite straightforwardly, "emitting laser energy." Cf. Micro Chem., 194 F.3d at 1258 (function is "that explicitly recited in the claim").

AngioDynamics (but not VSI) argues (at 17) that the function of the means-plus-function limitation in claim 9 "goes much further in Claim 9, requiring that the structure perform such emission in intraluminal contact with the blood vessel."

AngioDynamics' request that the Court identify a function beyond that actually recited in the claim, in an effort to narrow the "corresponding structure," is a common tactic of defendants seeking to avoid infringement. It is improper and invites legal error, as numerous Federal Circuit panels have held. E.g., Golight, Inc. v. Walmart Stores, Inc., 355 F.3d 1327, 1334 (Fed. Cir. 2004) (impermissible to limit "horizontal drive means for rotating said lamp unit in a horizontal direction" to further require the function, disclosed in the patent specification but not recited in the claim, of rotating through 360 degrees); Texas Digital Sys., Inc. v. Telegenic, Inc., 308 F.3d 1193, 1208 (Fed. Cir. 2002) (district court erred in construing "color control means for selectively controlling the *durations* of the pulses applied to the light sources" to further require the function of "selectively controlling the *on times* of the light sources") (emphasis added); Wenger Mfg., Inc. v. Coating Machinery Sys., Inc., 239 F.3d 1225, 1233 (Fed. Cir. 2001) (holding that "the district court erred in interpreting the 'air circulating means' limitation as requiring structure capable of *recirculating* air.") (emphasis in original).

Under black-letter Federal Circuit law, the function of the "means for emitting laser energy" is nothing more than "emitting laser energy."

Identifying the function of the "means for emitting laser energy" should have been an uncontroversial task. Cf. Intel Corp. v. Broadcom Corp., 172 F. Supp. 2d 516, 533 (D. Del. 2001) ("The parties agree that the function of the pixel interpolating means is the phrase that

follows the word 'for' in the [means-plus-function] element."). Indeed, Defendant VSI agrees with Diomed that the recited function is nothing more than "emitting laser energy into the blood vessel." (VSI Br. at 8). The reason for AngioDynamics' attempt to attach an impermissible limitation to the recited function becomes apparent at the second step of the analysis (discussed in the next section) – identifying the corresponding structure for performing the claimed function.[5]

2. The Corresponding Structure

Once the claimed "function" has been properly identified, the next step in construing a means-plus-function limitation is to locate the "corresponding structure" disclosed in the patent specification for performing that function. Here the Federal Circuit provides two important principles that must be followed.

First, the corresponding structure is the *overall* structure disclosed for performing the claimed function, *not* the individual components of that structure in the patent's preferred embodiment.

> The individual components, if any, of an overall structure that corresponds to the claimed function are not claim limitations. Rather, the claim limitation is the *overall structure* corresponding to the claimed function.

Odetics, 185 F.3d at 1268 (emphasis added).

> Delving into the 'nuts-and-bolts' of every corresponding structure goes beyond what the means-plus-function statute requires…. an overzealous defendant may attempt to avoid liability for infringement by whittling a corresponding structure down to its smallest sub-components and then arguing that the sub-components or their equivalents are not present in the accused product.

Raytheon Co. v. McData Corp., 2004 WL 952284, *6 (E.D. Tex. Feb. 10, 2004).

[5] AngioDynamics and VSI urge the same legally incorrect "corresponding structure," but VSI does so without mis-identifying the claimed function.

A **second** rule is that structure only "corresponds" to the claimed function if it is *required* to perform that function. Micro Chem., 194 F.3d at 1258 ("Nor does the statute permit incorporation of structure from the written description beyond that *necessary* to perform the claimed function.") (emphasis added); Genzyme Corp. v. Atrium Medical Corp., 212 F. Supp. 2d 292, 308 (D. Del. 2002) (concluding that it would be improper to limit "one way valve means," under § 112, ¶ 6, to the particular valve structure shown in the specification because "only a simple 'check valve' is required to perform the function of the one-way valve means"); Motorola, Inc. v. Vosi Techs., Inc., 2001 WL 1646559, *5 (N.D. Ill. Dec. 21, 2001) (holding that corresponding structure for "antennae means for transmitting and receiving mobile telephone communication signals" does *not* include a requirement that the antenna be on the exterior of the vehicle as disclosed in the patent because "the physical location of the antenna does not appear to be necessary to the claimed function [of transmitting and receiving communications signals]").[6]

Accordingly, the structure disclosed in the '777 patent that corresponds to the function "emitting laser energy," is a fiber optic line having an exposed portion (necessary for allowing the laser energy to be emitted from an otherwise coated fiber). The specification explicitly links that structure to the "emitting" function repeatedly:

- "[L]aser energy … is delivered in bursts ***through fiber optic line 40 into the vein wall***." (Col. 5, lines 17-19) (emphasis added).
- "While laser energy is delivered in bursts ***through the fiber optic line 40***, the fiber optic line is incrementally withdrawn from the greater saphenous vein." (Col. 5, lines 24-26) (emphasis added).
- "Fiber optic line 40 has a tip 41 that is uncoated so as to allow emittance of laser energy. The remainder of fiber optic line 40 can be coated… The coated portion of fiber optic line 40 will not emit laser energy." (Col. 4, lines 52-56).

[6] See also Panduit Corp. v. Band-It Idex, Inc., 2000 WL 1121554, *13 n.7 (N.D. Ill. June 27, 2000) ("The parties disagree about whether the identified structure must simply 'correspond' to the identified function or must be 'necessary' to perform [it] … Although the statute uses the word 'corresponding,' the case law interpreting the statute uses the word 'necessary.' *See Micro Chem.*, 194 F.3d at 1258 … The word 'necessary' is thus a gloss on the word 'corresponding,' which reflects governing Federal Circuit law that we are bound to follow.").

The point is so clear that even AngioDynamics itself, when it disclosed its proposed claim interpretation on September 1, 2004 as required by the Court's Scheduling Order, stated that the corresponding structure was nothing more than a "fiber optic line or equivalent structure." (Ex. D to Opening Diomed Brief in Diomed v. AngioDynamics).[7] Only after seeing Diomed's position did AngioDynamics adopt a narrower position, asking the Court to read the limitation "having an uncoated rounded tip" into the corresponding structure:

Claim Language	AngioDynamics' Position On Sept. 1	AngioDynamics' Position On September 21 And In Briefing
"means for emitting laser energy"	a fiber optic line or equivalent structure	a fiber optic line ***having an uncoated rounded tip*** or equivalent structure

VSI likewise adopted the same narrower position in its September 21 submission and in its October 1 brief. (VSI Br. at 8 & Ex. 10).

Reading a "rounded tip" into the corresponding structure invites legal error for two independent reasons. First, it goes beyond the "overall structure" authorized by statute and attempts to incorporate aspects of a preferred embodiment. Odetics, 185 F.3d at 1268 ("The individual components, if any, of an overall structure that corresponds to the claimed function are not claim limitations. Rather, the claim limitation is the overall structure corresponding to the claimed function."). This is a classic case of "an overzealous defendant … attempt[ing] to avoid liability for infringement by whittling a corresponding structure down to its smallest sub-components and then arguing that the sub-components or their equivalents are not present in the accused product." Raytheon, 2004 WL 952284 at *6.

The second defect in the Defendants' proposed "rounded tip" interpretation is that it improperly incorporates structure that is not *necessary* to performing the task of "emitting laser energy." Micro Chem., 194 F.3d at 1258. Laser energy will be emitted regardless of the location

[7] VSI did not offer a construction of "means for emitting laser energy" in its September 1 proposed construction.

or shape of the fiber's exposed portion. Indeed, the '777 patent teaches that, in the preferred embodiment, although the exposed portion[8] of the fiber is "is preferably rounded in shape … *other shapes are contemplated*." (Col. 4, lines 59-60) (emphasis added). Where such a particular configuration is not necessary to the recited function, it may not be included as corresponding structure as a matter of law. Micro Chem., 194 F.3d at 1258.

The Motorola case provides an instructive example. In Motorola, the function of the means-plus-function recitation "antennae means for transmitting and receiving mobile telephone communication signals" was held to be nothing more than what followed the phrase "means for" – namely, "transmitting and receiving mobile telephone communication signals." 2001 WL 1646559 at *4. The Motorola court rejected the defendant's argument that the "corresponding structure" should be limited to an antenna on the *exterior* of the vehicle because that location was described in the patent specification. Quite simply, the court concluded:

> [T]he physical location of the antenna does not appear to be necessary to the claimed function of "transmitting and receiving mobile telephone communication signals," we decline to construe the corresponding structure to require a particular placement of the "antennae means."

Id. at *5 (citing Micro Chem.).

So too here, there is no question that the exposed portion can be in locations other than a "tip" and can take shapes other than "rounded," while the fiber still accomplishes the function of "emitting laser energy." A "rounded tip" is not *necessary* for accomplishing the emitting function; all that is necessary is that a portion of the fiber be exposed (i.e., uncoated) so as to permit emission of laser energy from the fiber.

[8] For convenience, the exposed portion may be referred to as the "tip," and indeed it is located at the tip in both Defendants' accused products. As explained in Diomed's initial Markman brief, however, the patent does not limit the exposed portion to being at the tip of the fiber.

The roundedness of the tip in the preferred embodiment serves a *different* function – "it enables the operator to more easily control the amount of vein to be treated and decreases the risk of perforation of the vein during positioning of tip 41." (Col. 4, lines 60-64). This different function reinforces that including a "rounded tip" as corresponding structure for the *emitting function* in claim 9 would be legal error. Medical Instr. & Diag. Corp. v. Elekta AB, 344 F.3d 1205, 1216 (Fed. Cir. 2003) (district court erred in identifying software as corresponding structure where software was "described in the specification as performing other functions"); Medtronic, Inc. v. Adv. Cardio. Sys., Inc., 248 F.3d 1303, 1313 (Fed. Cir. 2001) (where structure served function different than that recited in the claim, "one skilled in the art would not perceive any clear link or association between these structures and the [claimed] function.").

AngioDynamics' argument (Angio Br. at 17-18) based on Fonar Corp. v. General Elec. Co., 107 F.3d 1543 (Fed. Cir. 1997), that the '777 patent's contemplation of other tip shapes is insufficient to denote corresponding structure, is a red herring because (as discussed above) the "tip" is not part of the corresponding structure at all. (It is neither "necessary" to the claimed function nor the "overall" structure for performing that function.)

In any event, AngioDynamics mischaracterizes the holding of Fonar, which actually supports Diomed. The Fonar court noted (in a section of the decision not mentioned by AngioDynamics) that when structure of a particular shape or form is not necessary to the execution of a function in a method claim, the corresponding structure is not limited to the form disclosed if the specification states that "other forms may be used." Fonar, 107 F.3d at 1550-51 ("[W]e agree with Fonar that the method claims looked at with or without the section 112, ¶ 6 limitation are not limited to use of a generic gradient wave form."). The section of Fonar cited by AngioDynamics deals with apparatus claims (i.e., claims directed to a device). Only method

claims are at issue here, and in that context Fonar holds that the Court should embrace the statement that "other shapes are contemplated" (Col. 4, line 60) as corresponding structure.[9]

The Defendants' proposed construction is in error for a further, independent reason that their briefs fail substantially to address. The doctrine of claim differentiation prohibits a court from reading an independent claim to be as narrow as a claim that depends from it. Wenger, 239 F.3d at 1234. Here, this doctrine precludes a reading of claim 9 as requiring the structure corresponding to the "means for emitting laser energy" to have a rounded tip. Dependent claim 15, which depends from independent claim 9 (through intermediate dependent claim 14), expressly limits the "means for emitting laser energy" to one having a rounded tip. "The dependency of claim [15] on claim [9] strengthens" the claim differentiation presumption, id., because "where the limitation that is sought to be 'read into' an independent claim already appears in a dependent claim, the doctrine of claim differentiation is at its strongest." Liebel-Flarsheim, 358 F.3d at 910.

Diomed has thus requested that the means-plus-function recitation "means for emitting laser energy" in claims 9 and 21[10] be interpreted to mean:

> any of the stand-alone fiber optic lines disclosed in the '777 patent specification and equivalents thereof (hereinafter "fiber optic line")

B. "inserting means for emitting laser energy into the blood vessel"

As explained in Diomed's opening brief, this step of the claimed method is straightforward and means:

[9] The disclosure that "other shapes are contemplated" is sufficient to encompass shapes known in the art. S3 Corp. v. NVIDIA Corp., 259 F.3d 1364, 1371 (Fed. Cir. 2001) (generic disclosure of "selector" sufficient under § 112, ¶ 6 because "a selector is of well known electronic structure").

[10] Although the discussion in this brief focuses on claim 9, limitations that also appear in claim 21 must be interpreted the same way. Dayco Prods., Inc. v. Total Containment, Inc., 329 F.3d 1358 (Fed. Cir. 2003) ("[I]f a claim term appears in more than one claim, it should be construed the same in each.").

inserting the fiber optic line [defined above] into the interior lumen of the blood vessel

There appears to be no material dispute between the parties with respect to the meaning of this limitation. (Angio Br. at 16).

C. "laser emitting section"

As recited in claims 9 and 21, the "laser emitting section" is part of the "means for emitting laser energy." As explained previously (Diomed Br. at 13-14), the laser emitting section must be exposed (i.e., uncoated) to allow laser energy to be emitted from the fiber. Accordingly, Diomed has requested that the phrase "laser emitting section" be construed as follows:

an exposed portion of the fiber optic line [defined above] from which laser energy is emitted (e.g., the bare, uncoated tip of the fiber optic line) (hereinafter "bare tip")

VSI contends (at 1, 9) that "laser emitting section" should be limited to an "uncoated, rounded tip" of the fiber. Although AngioDynamics does not directly address this limitation, it appears to agree with VSI based on its treatment of the "means for emitting laser energy" limitation of which the "laser emitting section" is a part.

Limiting the "laser emitting section" to a "rounded tip" as shown in the preferred embodiment would constitute legal error for two reasons. First, as discussed above, a claim cannot be limited to unrecited features of the preferred embodiment absent "words or expressions [in the specification] of *manifest exclusion or restriction*." Innova, 381 F.3d at 1117. There is no such expression in the '777 patent specification that would limit the exposed portion to a "rounded" tip – or, for that matter, to a "tip" at all – and the Defendants point to none.

Likewise, the doctrine of claim differentiation further establishes that the "laser emitting section" of claims 9 and 21 need not be located at the "tip" of the fiber, and need not be "rounded." These very limitations are recited in *dependent* claims 14 and 15 which depend from independent claim 9 – and this is the situation in which "the doctrine of claim differentiation is at its strongest." Liebel-Flarsheim, 358 F.3d at 910.

The Defendants largely ignore claim differentiation in their briefs, with the exception of passing citations to Toro Co. v. White Consol. Ind., Inc., 199 F.3d 1295 (Fed. Cir. 1999). (Angio Br. at 21; VSI Br. at 12 n.4). Toro does not undermine claim differentiation here.

In Toro, the Federal Circuit noted that the claim differentiation doctrine creates a presumption that can be rebutted in limited circumstances. Id. at 1302 (doctrine "does not override clear statements of scope in the specification and the prosecution history").

The question in Toro was whether a "unitary structure" recited in a dependent claim could be deemed part of an independent claim from which it was absent. The court found that the "unitary structure" at issue in that case *was* the invention. Id. at 1301-02 ("[T]he invention is described throughout the specification *as it is claimed*.") (emphasis added). Here, by contrast, the invention – a method for treating blood vessels by emitting laser energy while the laser emitting section (i.e., the exposed or uncoated portion) of a fiber optic line is in contact with the inner wall – is not defined or limited by the shape of the fiber tip. Once again, nothing less than clear and unambiguous "expressions of manifest exclusion or restriction" will limit a claim based on the specification in this way. Innova, 381 F.3d at 1117. There is no such express exclusion here, and the Defendants have pointed to none. Cf. Comark 56 F.3d at 1187 (applying claim differentiation doctrine and noting that the infringer "has not shown any reason sufficient to rebut the presumption").

What is more, the dependent claim in Toro contained more than one additional limitation. See 199 F.3d at 1302 ("[C]laim 17 not only replaces 'including' with 'carried by,' but also specifies [another aspect of] the restriction ring."). When a dependent claim recites more than one limitation not present in the independent claim, the presumption against deeming one of those limitations to be a limitation of the independent claim is weakened. Telemac Cellular Corp. v. Topp Telecom, Inc., 247 F.3d 1316, 1326 (Fed. Cir. 2001) ("[C]laim 3 embraces additional limitations not encompassed within claim 1… Therefore, the doctrine of claim differentiation does not lead us to reach a different conclusion."). In this case, dependent claim 14 recites *only one* limitation not present in independent claim 9, namely that the laser emitting section is located at a "tip" of the emitting means. Likewise, dependent claim 15 recites *only one* additional limitation not in claim 9, namely that the tip is "rounded." Accordingly, the doctrine of claim differentiation is at its strongest, and prohibits a reading of claim 9 to include the additional limitations appearing solely in claims 14 or 15. E.g., RF Delaware, Inc. v. Pacific Keystone Tech., Inc., 326 F.3d 1255, 1264 (claim construction must be "supported by the doctrine of claim differentiation" in such a case); Karlin Tech., Inc. v. Surgical Dynamics, Inc., 177 F.3d 968, 971-72 (Fed. Cir. 1999) (where independent claim 1 recited "threads," dependent claim 8 recited specified "said threads are locking threads" and dependent claim 9 specified "said threads are interrupted," the threads of claim 1 need not be "locking" or "interrupted").

Finally, because the "laser emitting section" is concededly part of the "means for emitting laser energy," (VSI Br. at 1, 9), construction of "laser emitting section" to be a "rounded tip" would, by extension, import that same limitation into the "means for emitting laser energy." This is impermissible as a matter of law for the reasons set forth in Section V(A) above. Accordingly, for those additional reasons, the "laser emitting section" cannot be construed to require that the exposed portion of the fiber be "rounded" or located at the fiber "tip."

D. "placing said laser emitting section of said emitting means into intraluminal contact with the blood vessel"

As outlined in the Summary above (Section II), both AngioDynamics and VSI argue that the phrase "placing … in contact" in claim 9 should be read to require "deliberate and systematic" acts, namely "compression" and "drainage" of the blood vessel, even though no such limitations are recited.

The stridency of the Defendants' arguments on this point is surprising given that neither party advocated such a limitation in their claim construction contentions served on Diomed on September 1 as required by the Court. Having conceded the point before, their belated effort to dispute it is neither credible nor, in any event, legally supportable.

AngioDynamics' initial claim construction served on September 1 said nothing about "compression" or "drainage." Only later, in its September 21 purported revision,[11] as well as in its subsequent October 1 opening brief to the Court, did AngioDynamics emerge from behind the sandbag and advocate "reading into" claim 9 such "deliberate and systematic" action to achieve contact:

Claim Language	AngioDynamics' Position On Sept. 1	AngioDynamics' Position On Sept. 21	AngioDynamics' Position In Its Oct. 1 Brief
"placing … into intraluminal contact"	putting the uncoated tip of the fiber optic line in physical contact with the interior surface of the [vessel]	***deliberately and systematically*** putting the uncoated tip of the fiber optic line in physical contact…	***deliberately and systematically*** putting the uncoated tip of the fiber optic line in physical contact… ***this requires drainage of blood and compression of the vein***.

Similarly, VSI said nothing about "compression" or "drainage" in its September 1 claim submission required by the Court. Only in its later purported revisions did VSI argue that "placing" must be a "deliberate and systematic" act, namely compression and drainage.

[11] Neither AngioDynamics nor VSI sought or obtained leave to alter the claim construction positions they were required to (and did) set forth on September 1.

Claim Language	VSI's Position On Sept. 1	VSI's Position On Sept. 21	VSI's Position In Its Brief
"placing … into intraluminal contact"	"Placing" means to put or set in a particular place, position or situation.	***[W]e again agree with AngioDynamics*** that "placing" requires an ***affirmative and deliberate act, such as the drainage and compression.***	***deliberately and systematically*** putting the uncoated tip of the fiber optic line in physical contact… ***this requires drainage of blood and compression of the vein***.

Turning to the merits of the Defendants' argument, they first contend that claim 9 must be limited to compression and drainage because that is the "only" way disclosed for achieving contact between the fiber and the vessel wall. (Angio Br. at 20; VSI Br. at 11). This argument has been rejected explicitly by the Federal Circuit. "[T]he applicant's choice to describe only a single embodiment does not mean that the patent clearly and unambiguously disavowed other embodiments." Home Diagnostics, Inc. v. Lifescan, Inc., 381 F.3d 1352, 1357 (Fed. Cir. 2004).

Home Diagnostics is instructive. The patent claimed a method including the step of taking readings "at specified time intervals upon detecting a predetermined drop" in a particular parameter. Id. at 1354. The patent disclosed one way of accomplishing the claimed step of taking readings at such intervals, and the accused infringer sought to limit the claim accordingly. The Federal Circuit disagreed, holding that the patent's disclosure "does not clearly and unambiguously disavow other ways of [accomplishing the claimed step] within the scope of the claim language." Id. at 1357.

So too here, claim 9 requires "contact" between the fiber and the blood vessel wall, but does not specify how that contact must be achieved. As described in the Summary above (Section II), the '777 patent describes "compression" and "drainage" of the vessel as a preferred way to "***ensure***" contact – but never disavows other ways to achieve contact, and never contends that contact can only be achieved by using the preferred steps.

The Defendants cite several cases in which the Federal Circuit limited the scope of patent claims based on express "disavowals" in the specification. An examination of these cases reinforces that no such "disavowal" (Angio Br. at 21) occurred here.

For example, Microsoft Corp. v. Multi-Tech. Sys. Inc., 357 F.3d 1340 (Fed. Cir. 2004) presented the classic case in which the patent specification described "the invention" itself as being limited to transmission "over a standard telephone line." Id. at 1348. Given this "expression of manifest exclusion," Innova, 381 F.3d at 1117, the patent claims did not encompass transmission over a network such as the Internet. Microsoft, 357 F.3d at 1354.

The same is true of Biogen, Inc. v. Berlex Labs., Inc., 318 F.3d 1132, 1140 (Fed. Cir. 2003) ("[T]he specification *defines the invention as* the use of a single DNA construct to introduce the linked human interferon gene.") (emphasis added); Scimed, 242 F.3d at 1343 (limiting claims to require structure described in specification as "the present invention" itself and also as "the basic sleeve structure for *all embodiments of the present invention contemplated and disclosed herein*") (emphasis in original), Watts v. XL Sys., Inc., 232 F.3d 877, 883 (Fed. Cir. 2000) (the specification expressly characterized a particular feature as "*the present invention*") (emphasis added); Toro, 199 F.3d at 1301-02 ("unitary structure" *was* the invention described *and claimed*);[12] Cultor Corp. v. A.E. Staley Mfg. Co., 224 F.3d 1328, 1331 (Fed. Cir. 2000) (specification "explicitly defined" claim term); and Wang Labs., Inc. v. America Online, Inc., 197 F.3d 1377, 1383 (Fed. Cir. 1997) (the embodiment described "*is the invention itself* and not simply a 'preferred' example of a broader invention") (emphasis added).

[12] The Defendants make much of the Toro court's observation that "the specification describes the advantages of unitary structure as *important to the invention*," id. at 1301 (emphasis added), pointing to the use of the word "important" in the '777 patent. (Angio Br. at 21-22; VSI Br. at 11). In point of fact, the word "important" appears only one time in the '777 patent, in describing drainage of blood as "important to ***insure*** direct contact of the vessel walls with tip 41 during delivery of laser energy." (Col. 6, lines 11-13) (emphasis added). Drainage is not said to be "important to the invention" as the unitary structure was in Toro, but as important to "insure" contact – a statement that certainly does not exclude contact being achieved in other ways.

Once again, there is no such statement in the '777 patent. Indeed, the statements regarding compression and drainage on which the Defendants rely cut the other way, clarifying that such acts are recommended as optional or preferred ways to *ensure* contact – they are *never* described as mandatory even if contact has been achieved in some other way. And again, those statements were made in the context of a description of "representative ... methods of the present invention" – not the absolute limits of the invention as Defendants seem to suggest.

- "[T]he compression of greater saphenous vein 30 around tip 41 is maintained as fiber optic line 40 is withdrawn. This method ***insures*** damage to the entire thickness of the vein wall of greater saphenous vein 30, ultimately resulting in fibrosis of the vein wall." (Col. 5, lines 26-31) (emphasis added).
- "The drainage of blood is important to ***insure*** direct contact of the vessel walls with tip 41 during delivery of laser energy." (Col. 6, lines 11-13) (emphasis added).
- "[V]ein 54 is emptied of blood and compressed to ***insure*** direct contact of the vessel walls with tip 41 during delivery of laser energy." (Col. 6, lines 42-45) (emphasis added).

Nowhere are compression and drainage described as "the invention." To the contrary, as discussed in the Summary above (Section II), "compression" was shown in the prior-art Goldman patent. The distinguishing feature of the '777 patent over the prior art, which renders the invention patentable, is indisputably *contact*.

The remainder of the Defendants' cases are similarly unavailing, for they all involve "expressions of manifest exclusion," Innova, 381 F.3d at 1117, that simply are not present in the '777 patent specification.

In Bell Atlantic Network Svcs., Inc. v. Covad Comm'ns Group, Inc., 262 F.3d 1258 (Fed. Cir. 2001), the patent, directed to a system for transmitting data over a network, contemplated data being transferred in two directions (upstream and downstream), with three possible "modes" of operation: (1) "symmetrical" (equal bandwidth in the upstream and downstream directions); (2) "asymmetrical" with more upstream than downstream bandwidth; and (3) "asymmetrical"

with more downstream than upstream bandwidth. Id. at 1263-66. The patent consistently used the term "mode" to refer to these three possibilities, and consistently used the term "rate" to refer to something else – the *specific data transfer rate* in a given direction. Id. at 1270.

The patentee sought a construction of the word "mode," based on its "ordinary meaning," that would have encompassed both "mode" and "rate" as used in the patent specification. Id. at 1269. The Federal Circuit concluded that the patent's consistent use of "mode" to mean something *different* from "rate" precluded a construction of "mode" that would encompass both. Id. at 1272 ("[B]ecause the two terms are used separately and distinctly, different 'modes' cannot be created by varying the data rate within one of the three broad categories.").

This case presents the opposite scenario. The '777 patent never distinguishes "placing" the fiber in contact with the vessel wall from some other act that might then be excluded from the claim scope. Rather, it simply provides examples of how contact may optionally be "ensured" according to a preferred embodiment.

In Abtox, Inc. v. Exitron Corp., 122 F.3d 1019 (Fed. Cir. 1997), *the claim itself* was limited to one chamber, such that it could not be read to cover multiple chambers. Id. at 1024 ("Repeatedly the claim refers to 'said chamber' as it describes various portions of the apparatus. This term itself, 'said chamber,' reinforces the singular nature of the chamber.").

Unlike the above cases, in situations like the one at bar, where a method claim recites a step that can be performed in various ways, some of which are not described explicitly in the specification, the Federal Circuit has consistently concluded that the claims are not to be limited to a particular way of performing the claimed step. E.g., Home Diagnostics, 381 F.3d at 1357 (discussed above); Fuji Photo, 2004 WL 2248087 at *10 (declining to limit method steps to being performed in a darkroom: "[N]othing in the specification suggests that the only way to avoid exposing the film during the loading process is to perform the process in a darkroom.").

Another example is Kalman v. Kimberly-Clark Corp., 713 F.2d 760 (Fed. Cir. 1983). The method claim at issue in Kalman recited the step of "effecting movement" of a filter band within a particular claimed apparatus. Id. at 763. The defendant argued that "in light of the [patent's] disclosure, the independent claims must be read as limited to a process and apparatus which 'effect movement' of a filter band or ribbon by differential hydrostatic pressure" (the preferred way of achieving such movement as disclosed in the patent's specification). Id. at 770. The Federal Circuit declined to introduce such a limitation, in part due to the doctrine of claim differentiation. Id. ("[D]ependent claims 2 and 33 (not in issue) contain that very limitation."). As discussed above, the same is true here – dependent claims 10 and 17 contain the very "compression" and "drainage" limitations that the Defendants seek to "read into" independent claim 9.

The Defendants' remaining arguments to limit the claims based on the '777 patent specification are dispensed with readily as a matter of law. For example, VSI argues (at 11) that a narrow construction should be adopted because "[a]ny construction of 'placing … into intraluminal contact' broader than draining blood and applying compression is … invalid because it is not enabled," citing Liebel-Flarsheim, 358 F.3d at 911. The argument is not supported by the case VSI cites – indeed, that case holds the opposite. Liebel-Flarsheim *reversed* the district court, which had adopted a narrow claim interpretation on that basis that it was "unlikely that the specification [would] enable one of skill in the art to make and use" a device covered by the claims if construed broadly. Id. at 911. The Federal Circuit held that "it would be improper to disregard the effect of [broad claim language] simply because the claims, if broadly construed, might be vulnerable to a challenge to their priority and validity." Id. In any event, it is also black-letter law that a claim is not invalid for lack of enablement simply because it is broader than the preferred embodiment. E.g., Fuji Photo, 2004 WL 2248087 at *10 (rejecting

argument that narrow claim construction was necessary to maintain validity: "It is a familiar axiom of patent law … that the scope of the claims is not limited to the preferred embodiments described in the specification."). The '777 patent is presumed valid. 35 U.S.C. § 282. The burden to prove otherwise is a heavy one requiring "clear and convincing evidence." There can be no genuine dispute that the claim construed as Diomed suggests is valid because the '777 patent is not limited to "compression" and "drainage" (as discussed above).[13]

Lastly, AngioDynamics refers (at 3-4) to the "objects of the invention" (Col. 2, line 66 – Col. 3, line 23) as supporting its view that compression and drainage are required. Neither compression nor drainage, however, are mentioned in the "objects." Indeed, even if one of the "objects" had spoken of compression or drainage, this would not have justified limiting the claims of the '777 patent as a matter of law. Liebel-Flarsheim, 358 F.3d at 908 ("The fact that a patent asserts that an invention achieved several objectives does not require that each of the claims be construed as limited to structures that are capable of meeting all of the objectives.").

Defendants next turn to the prosecution history in a continuation of their admitted attempt to convince the Court to read limitations into the claims. See Angio Br. at 23 ("Statements in the prosecution history … also require *reading those limitations into the claims*.") (emphasis added).

In reviewing a patent's prosecution history, proper understanding of the inventors' arguments for patentability is critical. A litigant's mischaracterization or exaggeration of the prosecution history can lead to error.

[13] In a related argument, AngioDynamics appears to suggest that the invention of the '777 patent would be inoperable (i.e., would not work) without the compression and drainage steps. Not only is this argument incorrect, it is irrelevant. Such an argument was made and rejected in RF Delaware: "Although Pacific points out one sentence in the specification, which indicates that a filter bed with a flocculation layer is more effective than one without a flocculation layer, that sentence alone does not lead to the conclusion that the filter bad in claim 1 is inoperable without a flocculation layer. Whether a filter bed with only a filter layer can work goes to validity of the claim (not in issue here), not how it is construed, because in the present case the claim language is clear on its face." 326 F.3d at 1256 n.4.

Superguide Corp. v. DirectTV Enter., Inc., 358 F.3d 870 (Fed. Cir. 2004) is a good example. In that case, the relevant patent claim was directed to a method of "electronically controllably viewing updateable information" (i.e., desired scheduling information) "on a television screen." Id. at 875. One of the limitations of the claim required that the viewer be able to direct a microcontroller "to perform a search on *at least [the] updated programming information contained in the [memory] of [the] microcontroller*." Id. (emphasis added).

During prosecution, the Patent Examiner cited a prior art reference describing a system in which a user could assign a location in memory to store a desired telephone number, enabling the user to retrieve that number by inputting its address into a computer. The inventor distinguished this reference by arguing that in the prior art, "no search of the [memory] takes place," while his invention involved "a search of all the coded information." Id. at 882.

The district court held that the claim should be limited to a search of "all the information" stored in memory, a conclusion that the accused infringer (Echostar) supported by pointing to the prosecution history. The Federal Circuit concluded that Echostar had overstated its case.

> [T]he '578 patentees were merely distinguishing their invention from one that requires *no searching at all* by pointing out that their invention provides for searches of coded information stored in memory. They did *not* clearly disavow the scope of searches covered by claim 1 because [the prior art] did not conduct *any* type of search…. Moreover, a statement that a search is conducted on "all of the coded information" is not commensurate with an examination of every piece of data stored in memory. If the memory is ordered in such a way that a search of only part of the memory can retrieve all the records that meet the user's criteria, the search has been conducted on all the *coded* information without having examined every record in memory…. Accordingly, we conclude that the claim phrase "to perform a search" means *any* examination of the program listings stored in [memory] to find those that meet a user's search criteria.

Id. at 882-83 (emphasis added).[14]

[14] See also Wenger, 239 F.3d at 1235-36 ("While CMS argues that Wenger distinguished the prior art based on its inability to recirculate air, we agree with Wenger that the Benson patent was distinguished based on its lack of a housing.").

This case is similar. During prosecution of the '777 patent, the inventors distinguished the prior art references cited by the Examiner by arguing that those references do not disclose *contact* of the fiber with the vessel wall. The Defendants attempt to transform this into an argument by the inventors that their invention hinges on "compression" and "drainage." Those words, however, are not mentioned *anywhere* in the inventors' response to the Examiner.[15]

As a result, the Defendants are forced to argue that the inventors "incorporated" such language into their response by reference to the specification. (Angio Br. at 6; VSI Br. at 5). The argument is contorted and difficult to follow, but appears to proceed along more or less the following lines:

(1) In their response to the Examiner's rejection, the inventors stated: "Thus the device according to the claimed invention is arranged inside the vein to be treated and then the laser is directed against a wall of the vein to thereby cause fibrosis of the vein leading to a decrease in the diameter of the vein. (See specification p. 8, lines 16-28)." (Angio Ex. 6 at 5-6; VSI Ex. 2 at 83-84).

(2) The cited portion of the specification (page 8, lines 16-28) is a section from the "Brief Description of the Drawings" that describes Figures 10 through 13. (In the issued patent, the language appears at Col. 3, lines 59-67.)

(3) The cited portion of the specification notes that Figures 10 and 13 depict "compression," but there is no mention of "drainage."

(4) In order to further bootstrap "drainage" into the response, the Defendants rely on *later* "language in the specification," *not even cited, let alone quoted, by the inventors in their response to the Examiner*, that describes "drainage" as being depicted in Figure 13. (Angio Br. at 6) (referring to "the language in the specification detailing the actions in these figures").

The argument amounts to a *triple*-bootstrap – importing, into a description of a Figure, a later (unreferenced) part of the specification, reading that description into the prosecution history (which says nothing of the sort), and finally reading the prosecution history into the claims. This

[15] It is difficult to understand what good-faith basis AngioDynamics could have had to assert in its brief that "in response [to the Examiner] the '777 patentees further clarified just exactly how narrowly they had drafted the claims of their invention, explaining that the draining and compression described in their specification were actually part of the invention and how this limited scope of their invention and avoided the prior art" (Angio Br. at 5) and "[t]he patentee's statements in the prosecution history … specifically states that 'the device according to the claimed invention' requires drainage and compression." (Angio Br. at 25).

is about as far from the required "clear and unmistakable" disavowing action or statement as one could imagine. Omega Eng'g, 334 F.3d at 1325-26 ("[F]or prosecution disclaimer to attach, our precedent requires that the allegedly disavowing actions or statements made during prosecution be both clear and unmistakable.").

Indeed, even a much more straightforward argument of this type was recently rejected by the Federal Circuit in Sunrace Roots Ent. Co., Ltd. v. SRAM Corp., 336 F.3d 1298, 1307 (Fed. Cir. 2003). In that case, "[i]n asserting the patentability of these claims, SRAM directed the examiner to portions of the patent specification describing the cam structure" that the accused infringer sought to read into the claims. Id. at 1307. The Federal Circuit noted that SRAM's citation to the specification was made simply to apprise the Examiner of where relevant disclosure could be found, *not* to limit the claims. Id. (citation intended "to show that the written description was satisfied and that no new matter was being introduced with the amendment."). There is certainly no evidence here that the inventors' citation to the specification was intended to limit the claims – let alone in the contorted way that the Defendants suggest.

The Defendants' final argument for limitation of the '777 patent claims to "compression" and "drainage" as "deliberate and systematic" acts is based on a lone case, Combined Systems, Inc. v. Defense Tech. Co. of Am., 350 F.3d 1207 (Fed. Cir. 2003). See Angio Br. at 19-20; VSI Br. at 10. The case does not have the implication that the Defendants suggest.

The patent in Combined Systems was directed to so-called "low-lethality projectiles" (known as "bean bag rounds"). Id. at 1208. The bean bag is fired from a standard 12-gauge shotgun and is housed in a shotgun shell. The claimed method pertained to loading the bean bag into the shell, and included the steps of "forming folds" in the material of the projectile and "inserting said formed folds" into the shell. Id.

The dispute centered on whether a process in which folds were formed during insertion of the bean bag into the shell, as opposed to in a deliberate step preceding such insertion, would be covered by the claim. The Federal Circuit concluded, *based on the unique language of the claim*, that the folds had to be formed *before* insertion:

> [A]s a matter of grammar, the recitation of "*inserting said formed folds* … into said projectile compartment" forecloses – at least in the absence of compelling evidence to the contrary in the written description or prosecution history – a construction permitting the "folds" to be formed after or during insertion of the projectile into the projectile compartment in the shotgun shell.

Id. at 1211-12 (emphasis in original).

Quite simply, for "formed folds" to be inserted, the folds had to be formed already. This unique claim language was dispositive for the Federal Circuit. Id. at 1214 ("As discussed above, the language of the claim itself compels the conclusion that the claim requires the 'folds' to be formed *before* the projectile is inserted.") (emphasis in original). Having determined that the folds had to be formed before insertion, the court necessarily concluded that "gathers in the material that incidentally occur when a string is pulled to close the compartment" could not be within the scope of the "forming folds" claim limitation (since such action would of course occur after insertion). Id. Accordingly, the court sought to distinguish these later, accidentally-formed "gatherings" from the "folds" that were previously (and deliberately) formed that were the subject of the claim. Since there was no other way the folds could be formed outside the shell but through a "deliberate" act, the court construed the claim, on the unique facts of that case, to require "deliberate" formation. Id. at 1214-15.

Defendants' reliance on Combined Systems is further undermined by that court's own comment that "even if … a disclosure of forming folds during insertion into the compartment existed, this embodiment would not be covered *by the language selected by the claim drafter*." Id. at 1214 n.3 (internal quotations omitted). In other words, the Federal Circuit indicated that

different claim language (i.e., claim language not including the special temporal limitation of pre-formed folds) *would* have covered folds inevitably or accidentally formed during insertion, which were not formed "deliberately or systematically." In short, the holding of Combined Systems is not that gerunds must be read to have a "deliberate and systematic" limitation, as the Defendants suggest, but rather, more simply and obviously, that if a patent says that A has to happen before B, then A has to happen before B. By specifying that "formed folds" were "inserted," that patent, on those facts, was requiring that folding precede insertion. Here, by contrast, there is no such claim language. Nothing in the patent says "deliberately placing into contact" or "systematically placing into contact." It says simply "placing … into contact."

Indeed, Defendants' characterization of Combined Systems as holding that gerunds in method claims must be read to include a "deliberate and systematic" limitation is contrary to well-established Federal Circuit law. Patent infringement simply does not require intent. A method claim covers the recited method regardless of whether the acts are "deliberate." See, e.g., Dow Chem. Co. v. Mee Indus., Inc., 341 F.3d 1370, 1380 (Fed. Cir. 2003) ("[T]he motive of the accused infringer when performing a claimed method is simply not relevant."); Hilton Davis Chem. Co. v. Warner-Jenkinson Co., 62 F.3d 1512, 1519 (Fed. Cir. 1995) (en banc) ("Accidental or 'innocent' infringement is still infringement."), rev'd on other grounds, 520 U.S. 17 (1997).

There are countless cases in which gerunds in method claims have been construed *without* any requirement that such acts be "deliberate" or "systematic." E.g., Globetrotter Software, Inc. v. Elan Computer Group, Inc., 362 F.3d 1367 (Fed. Cir. 2004) ("storing"); Masco Corp. v. U.S., 303 F.3d 1316 (Fed. Cir. 2002) ("forming"); Wooster Brush v. Newell Operating Co., 250 F.3d 756, 2000 WL 748074 (Fed. Cir. 2000) ("winding," "applying," "wrapping," "forming"); Loral Fairchild Corp. v. Sony Corp., 181 F.3d 1313 (Fed. Cir. 1999) ("forming"); Texas Instr., Inc. v. Cypress Semiconductor Corp., 90 F.3d 1558 (Fed. Cir. 1996) ("connecting").

Diomed has accordingly requested that "placing … into contact" be construed as follows:

contacting the bare tip [defined above] and the inner wall of the vessel as the fiber optic line [defined above] is moved within and along the vessel lumen

E. "emitting said laser energy into the blood vessel … thereby decreasing the diameter of said blood vessel"

As explained in Diomed's opening briefs, the "emitting … thereby decreasing" limitation does not specify a particular duration, but instead requires that sufficient laser energy be emitted into the blood vessel to cause a decrease in the diameter thereof. In short, in the context of the asserted claims, the limitation is *qualitative* (referring to clinical efficacy), not *quantitative*. The patent specification makes this clear when it emphasizes that the duration and frequency of contact leading to the desired narrowing of the vessel may be varied for a particular vessel and nonetheless result in a therapeutically effective treatment. E.g., Col. 6, lines 16-18 (disclosing laser bursts from about 0.2 to about 10 seconds in duration) and Col. 5, lines 49-51 (noting that power and burst duration may be adjusted during the procedure based upon clinical observations and obtained results). Accordingly, Diomed has requested that this limitation be construed as:

emitting sufficient laser energy at the bare tip [defined above] of the fiber optic line [defined above] to cause vessel wall tissue damage (e.g., fibrosis) to lead to a decrease in the diameter of the blood vessel

VSI misapprehends Diomed's position when it states that Diomed "evidently contends" that "intraluminal contact" is not required (VSI Br. at 14) and that Diomed "contends that the [claim] reaches *any* contact of the uncoated tip of the fiber with the blood vessel, even if the contact is incidental, brief and unintentional." (VSI Br. at 9). To the contrary, as explained above, emission-during-contact is essential to the method's clinical efficacy, and sufficient laser energy must be emitted during contact to cause the desired clinical effect. Diomed simply

addressed the "contact" issue in the most natural place, namely the "placing … into contact" limitation above. Nothing in Diomed's position should be interpreted to suggest that emission of laser energy need not occur while the fiber is in contact with the vessel wall.

For its part, AngioDynamics argues (at 27-29) that "emitting … into the blood vessel" requires "maintaining compression" throughout the procedure. This takes the "compression" argument above yet another step further – reading in from the specification not only "compression" but a requirement that the compression be maintained throughout the procedure. Such a construction would violate Federal Circuit precedent against reading limitations from the specification into the claims, as well as the doctrine of claim differentiation.[16]

F. "emptying the blood vessel"

As explained in Diomed's opening brief, nothing in this claim limitation or the specification requires that the "emptying" be total, such that the vessel would be *completely* empty as the Defendants contend. (Angio Br. at 30-31; VSI Br. at 18-19). In addition to the cases cited on this point in Diomed's opening brief, CFMT, Inc. v. Yieldup Int'l Corp., 349 F.3d 1333 (Fed. Cir. 2003) is highly instructive. The claim limitation at issue in CFMT required "cleaning" semiconductor wafers. Id. at 1335. As in this case, the Federal Circuit observed that the "claims of the … patents state no standard of cleaning. '[C]leaning' in the context of this invention means generally removing contaminants from the wafer surface." Id. at 1338. Refusing to read a quantitative limitation into the claim, and specifically rejecting a construction that would require "removal of all contaminants" or even removal of contaminants according to a commercial standard, id. at 1339, the Federal Circuit concluded that "any meaningful 'cleaning' would satisfy the claimed goal of 'cleaning the semiconductor wafers.'" Id. at 1340.

[16] The argument relies again on a triple-bootstrap, importing limitations from one portion of the specification into another, then from there into the file history, and finally from the file history into the claims. (Angio Br. at 28-29).

The "cleaning" limitation in CFMT is indistinguishable from the "emptying" step in claims 10 and 21 of the '777 patent. That case, along with those cited in Diomed's opening brief, plainly establish that "emptying" need not be total. Accordingly, Diomed has requested that the phrase "emptying the blood vessel" be construed as follows:

removing some or all of the blood from the blood vessel

The Defendants cite no authority to the contrary. AngioDynamics does argue (at 31) that a less than completely empty vein might result in some blood clots being formed when laser energy is emitted (notwithstanding the stated "object" in the patent to avoid blood clots). Again, however, the "fact that a patent asserts that an invention achieved several objectives does not require that each of the claims be construed as limited to structures that are capable of meeting all of the objectives." Liebel-Flarsheim, 358 F.3d at 908.

G. "guidance means"

The parties agree that the "guidance means" recited in claim 16 is a means-plus-function limitation. (Angio Br. at 35). The function recited in the claim is locating the tip of the fiber. The disclosed structure for performing that function is:

> "Positioning of tip 41 is preferably accomplished by *emitting laser energy in the visible spectrum* through tip 41. This visible spectrum energy can be seen through the skin … Alternatively, *a traditional ultrasound imager*, shown generally as 42, may be used."

(Col. 5, line 66 – Col. 6, line 5) (emphasis added).

The "guidance means" of claim 16 should be interpreted to cover all such "corresponding structure" in the '777 patent specification and equivalents thereof. Accordingly, Diomed has requested that "guidance means" be interpreted to mean:

an aiming beam or an ultrasound imager and equivalents thereof

AngioDynamics argues that a human being is required as corresponding structure, and, citing Cardiac Pacemakers, Inc. v. St. Jude Medical, Inc., contends that this renders the claim invalid under 35 U.S.C. § 112. (Angio Br. at 35-36).

As a threshold matter, AngioDynamics misunderstands the holding of Cardiac Pacemakers. In Cardiac Pacemakers, the Federal Circuit concluded that a human being would be required as "corresponding structure" because nothing else in the patent specification was capable of performing the recited functions of the means-plus-function limitation. Id. at 1114 ("[O]nly the physician both monitors the ECG signal and activates the charging means."). The court then found the claim invalid for lack of corresponding structure *because the patentee had waived any argument that a human being could constitute corresponding structure in the patent-in-suit*. Id. at 1116 ("Because Cardiac Pacemakers has waived any argument to the contrary, the physician cannot constitute corresponding structure.").

Cardiac Pacemakers thus does not stand for the broader proposition, ascribed to it by AngioDynamics, that a human being can *never* constitute corresponding structure in a patent specification. That remains an open question. E.g. Acacia Medical Techs. Corp. v. New Destiny Internet Group, 2004 U.S. Dist. Lexis 13415, *30 (C.D. Cal. July 12, 2004) ("Because the specification of the '992 patent does not disclose a human being as corresponding structure for the identification coding means, the Court does not reach the legal issue of whether a human being can even be corresponding structure."); Advanced Respiratory, Inc. v. Electromed, Inc., 2003 U.S. Dist. Lexis 823, *13-15 (D. Minn. Jan. 10, 2003) (construing corresponding structure to include "human interaction with a tube, hose or switch" where specification disclosed "a person's hand to support the venting function").

In any event, this Court need not resolve that thorny legal issue because AngioDynamics' contention that a physician is required as corresponding structure stems from a misinterpretation of the claimed function. The claim recites "wherein said tip of said emitting means *is located* at the treatment site through the use of a guidance means." (emphasis added). The "function" of the "means" of the claim is therefore *to locate* the tip of the fiber within the vein – i.e., to indicate its location (e.g., to the physician). As the patent states, this function can be accomplished in at least two ways, by emission of a visible aiming beam or by ultrasound visualization of the tip. (Col. 5, line 66 – Col. 6, line 5). The corresponding structure, therefore, is an *aiming beam* or an *ultrasound imager*. The physician, who merely observes the indication of the tip's location, is not corresponding structure for the "locating" function.

AngioDynamics' erroneous suggestion that the corresponding structure is the physician stems from its mis-identification of the claimed function. AngioDynamics asserts that the function is "guiding," leading it to conclude that the corresponding "structure" is "the observation of the tip's emission of visible light or observation of an ultrasound imager." (Angio Br. at 35) (emphasis in original). In fact, however, the function of this limitation is to *locate* the tip. As discussed above, Federal Circuit law holds that the function is the *act* (i.e., the verb) recited in the claim (here, to "locate" the tip). AngioDynamics' confusion stems from the fact that the word "means" is preceded by another noun ("guidance"). But "guidance" is not the verb or act that defines the function in the claim. In a claim of the form "guidance means to do X," the function is "doing X," not "guidance." The Federal Circuit so held in a closely analogous case, Epcon Gas Sys., Inc. v. Bauer Compressors, Inc., 279 F.3d 1022, 1032 (Fed. Cir. 2002). In Epcon, the § 112, ¶ 6 limitation read "control means which are operative to inject gas into the mold." The Federal Circuit held that the function was the recited act, namely, "to inject gas into the mold" – not "control," the word that (like "guidance" here) preceded the word "means."

Here, no physician is needed to "locate" the tip – this is done by the aiming beam or the ultrasound imager.

H. Other Dependent Claims and "laser energy"

Diomed sees no material dispute over construction of the following additional recitations in the dependent claims addressed by AngioDynamics (but not Diomed or VSI): claim 11 ("angiocatheter"); claim 12 ("about 200 microns to about 600 microns in diameter"); claim 13 ("fiber optic line" is addressed by the parties in the context of the limitation "means for emitting laser energy," so this claim introduces no *new* disputes); claim 14 ("tip"); claim 17 ("applying compression"); and claim 18 ("in the range of about 500 nanometers to about 1100 nanometers"). Because these limitations are so straightforward and not the subject of any material dispute, Diomed believes they do not need formal Markman construction or re-wording by the Court. See U.S. Surgical Corp. v. Ethicon, Inc., 103 F.3d 1554, 1568 (Fed. Cir. 1997).

For claim 19, Diomed disagrees with AngioDynamics and VSI to the extent that neither the ordinary meaning of the term "bursts," nor anything in the '777 patent specification, requires that bursts be emitted in "short" or "timed intervals" (Angio Br. at 38) or that the bursts be "sudden" or "intense." (VSI Br. at 19). Here again, the defendants are attempting to import limitations not appearing in the claims. They are right that emitting energy in "bursts" means that the emissions would be "intermittent" (i.e., not continuous). But nothing in the claim language requires that these intermittent bursts be characterized further, e.g., as "short" or "timed" in any particular way. The specification, in fact, suggests that there can be a considerable range of durations of these bursts, and that their timing can be varied depending on clinical conditions. E.g., Col. 6, lines 16-18 (disclosing laser bursts from about 0.2 to about 10 seconds in duration) and Col. 5, lines 49-51 (noting that power and burst duration may be adjusted during the procedure based upon clinical observations and obtained results). In sum, if

the Court sees a need to expressly construe the language of claim 19 at all – and again, Diomed's position is that such construction is unnecessary as the ordinary meaning of the terms therein is readily accessible to a speaker of English – it should construe the claim simply as: "wherein said laser energy is delivered intermittently."

Finally, AngioDynamics and VSI have suggested that the Court construe the term "laser" or "laser energy." Diomed believes such construction is unnecessary for at least two reasons. First, the meaning of the term "laser" is well-known and therefore does not require further clarification. Second, the issue is moot in this case because both Defendants admit that their accused methods use lasers. See http://www.angiodynamics.com/pages/products/vein_laser.asp (calling AngioDynamics' procedure "laser treatment" and claiming (on an attached page) that it delivers "just the right amount of laser energy"); and http://www.vascularsolutions.com/products/varilase.php (asserting that VSI's procedure "delivers laser energy"). Accordingly, there should be no genuine dispute about this issue. Again, a court need not construe all limitations. U.S. Surgical, 103 F.3d 1554.

If the Court elects to construe the terms "laser" or "laser energy," Diomed disputes the definition advanced by the Defendants. The parties agree that "laser" is an acronym for "light amplification by stimulated emission of radiation." (Angio Br. at 15). AngioDynamics' further request, however, that the Court limit the definition to a device that emits a "beam of amplified monochromatic light energy" (Angio Br. at 16) is unduly narrow. For example, the online encyclopedia Wikipedia (www.wikipedia.com) defines "laser" as follows:

> [A] laser **generally** emits photons in a narrow, well-defined beam of light. The light is **often near-monochromatic**, consisting of a single wavelength or color, is highly coherent and is **often** polarised… Laser light **can be** highly intense — able to cut steel and other metals. The beam emitted by a laser **often** has a very small divergence (highly collimated). A perfectly collimated beam cannot be created, due to the effect of diffraction, but a laser beam will spread much less than a beam of light generated by other means…. [emphasis added]

Likewise, the Encyclopedia of Laser Physics and Technology (available on-line at http://www.rp-photonics.com/encyclopedia_l.html), notes that a laser "is a device for generating light"; "**can** have a number of special properties" including that it "is **usually** emitted as a laser beam which **can** propagate over long lengths without much divergence and can be focused to very small spots; and "**can** have a very narrow bandwidth (i.e., range of optical frequencies)." (Emphasis added).

As these definitions make clear, there can be many different types of lasers. Not all lasers have a "narrow, well-defined beam"; a laser need not necessarily be "monochromatic" (i.e., emit light at a single wavelength), nor even "near-monochromatic"; etc. Simply stating that a laser is "monochromatic" is not an accurate or complete definition of what qualifies as a laser.

AngioDynamics goes on to state (at 16) that "'laser energy,' therefore, means a beam of amplified monochromatic light energy emitted from such a device." To the extent the Court feels the need to define "laser energy" at all, it is simply "the energy emitted by a laser."

VI. CLAIM 1 IS NOT AT ISSUE AND SHOULD NOT BE CONSTRUED.

As noted above, Diomed provided the Defendants with an identification of the asserted claims at an early stage in this case. This early identification, which was provided pursuant to a stipulation of the parties and the Court's Scheduling Orders, was intended (as the Court itself observed) to enable the parties to focus solely on what was in dispute, narrow the focus of the case, and exchange early explanations of their claim construction positions.

AngioDynamics (but not VSI) now seeks to have claim 1 – a claim that is not being asserted against either Defendant by Diomed – brought into the case. Presumably AngioDynamics wishes to obtain a construction of this claim for purposes of its declaratory judgment counterclaims. But this attempt is improper, as the Court lacks declaratory judgment over claim 1 or any other claims of the '777 patent that Diomed is not asserting. See Grain

Processing Corp. v. Am. Maize-Products Co., 840 F.2d 902, 904-06 (Fed. Cir. 1988) (no case or controversy regarding patent claims asserted in original complaint but withdrawn by the patentee before trial) citing Prieser v. Newkirk, 422 U.S. 395, 401 (1975) ("[A]n actual case or controversy must be extant at all stages of review, not merely at the time the complaint is filed."); Howes v. Zircon Corp., 992 F. Supp. 957, 959-60 (N.D. Ill. 1998) ("As a preliminary matter I hold that I have no jurisdiction to address Zircon's motion for summary judgment on claims 1 or 16 [because] the Plaintiffs no longer allege infringement of claims 1 and 16 and thus no present case or controversy exists regarding their infringement."); Ultradent Prods., Inc. v. Life-Like Cosmetics, Inc., 924 F. Supp. 1101, 1106 n.3 (D. Utah 1996) ("The court's interpretation of claims is limited to those claims Ultradent asserts Life-Like has infringed. Although Life-Like seeks a declaratory judgment of invalidity of all claims … the unasserted claims are not properly before the court."); Biogen, Inc. v. Amgen, Inc., 913 F. Supp. 35 (D. Mass. 1996) (Stearns, J.) (granting motion to dismiss declaratory judgment counterclaim aimed at non-asserted patent claims).

What is more, even if the Court *could* exercise jurisdiction over non-asserted patent claims, it should decline to do so, in its discretion under the Declaratory Judgment Act, to avoid needless expenditure of time and resources by both the parties and the Court – in short, to further the efficiency goals of the Scheduling Orders that it entered in the first instance. EMC Corp. v. Norand Corp., 89 F.3d 807, 815 (Fed. Cir. 1996) (affirming discretionary dismissal of declaratory judgment claim because "this case was not one that furthered the objectives of the Declaratory Judgment Act.").

VII. CONCLUSION

For the above reasons, the claim interpretations proposed by Diomed should be adopted.

Respectfully submitted,

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By its attorneys,

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